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Agricultural Memorandum No 484

Drainage efficiency and lateness in spring cultivations - WEST

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The presentation of Ag Mem 478 is repeated for six stations in the WEST, namely

Newport (Salop)
Worcester
Stratford (Warwick)
Cheltenham (Glos)
Oxford
Reading (Berks)

The unavoidable losses (with Class A drainage) are here greater than in the south, but bad drainage appears to be punished less severely:-

	Good drainage (A)		Bad drainage (D)	
Schedule	South	West	South	West
7 days	1.81	2.18	6.77	6.35
10 days	3.01	3.27	10.00	9.19
14 days	4.89	5.08	15.54	13.71

This leaves the east, as might be expected, the 'preferred' area, and with a rapid deterioration to the north. The losses estimated in the south and west, despite higher annual average rainfalls, are not as great as could have been envisaged. This is because a dry spell is common to a relatively large area of high pressure, irrespective of annual rainfall, and high pressures are more common to the south of England. The poor conditions to the north-east are possibly due to rainfall off the North Sea.

Any comments or suggestions on this paper should be referred to the author.

Meteorological Office
Bracknell

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7-day Schedules

Date	Drainage	Newport A	Newport B	Newport C	Newport D	Worcester A	Worcester B	Worcester C	Worcester D
Before March 15		111	98	85	75	120	113	104	98
March 15-21		20	26	29	30	9	12	16	15
" 22-28		3	9	12	13	2	3	4	6
" 29-4				6	10				3
April 5-11				1	3	6	5	3	2
" 12-18		1				3	2	3	5
" 19-25		5	6	5	5		5	6	6
" 26-2			1	1	2			2	2
May 3-9									
" 10-16				1	2			2	3
Lost									
Percentage loss of Yield		2.5	3.5	4.9	5.6	2.1	3.2	5.2	6.4

	Stratford A	Stratford B	Stratford C	Stratford D	Cheltenham A	Cheltenham B	Cheltenham C	Cheltenham D
Before March 15	118	113	100	91	119	113	102	93
March 15-21	11	15	23	28	8	11	16	17
" 22-28	1		2	2	2	2	5	9
" 29-4	1		1	3				2
April 5-11			1	2	2	3	3	2
" 12-18	3	1			3	2	1	3
" 19-25	6	9	9	8	3	4	6	7
" 26-2		2	2	3	2	1		
May 3-9			2	3	1	3	2	1
" 10-16						1	2	2
Lost							3	4
Percentage loss of Yield	2.8	3.8	5.1	6.2	3.3	4.6	7.2	8.5

Date	Drainage	Oxford A	Oxford B	Oxford C	Oxford D	Reading A	Reading B	Reading C	Reading D
Before March 15		172	161	148	135	165	150	134	122
March 15-21		13	15	18	19	17	22	24	22
" 22-28		3	3	6	12	9	11	11	13
" 29-4		1	1	3	7		1	7	9
April 5-11		3	3	2	1	2	4	7	12
" 12-18		3	5	8	7	2		1	4
" 19-25		5	9	8	9	5	9	7	6
" 26-2			3	4	5		3	4	4
May 3-9				3	2			1	
" 10-16					3			3	3
Lost								1	5
Percentage loss of Yield		2.3	4.1	5.7	7.2	2.3	4.0	6.6	9.4

10-day Schedules

Date	Drainage	Newport A	Newport B	Newport C	Newport D	Worcester A	Worcester B	Worcester C	Worcester D
Before March 15		142	125	109	95	159	147	133	123
March 15-21		34	34	33	32	18	23	26	24
" 22-28		12	18	19	21	5	9	12	13
" 29-4		2	10	18	15			4	11
April 5-11		1	3	6	12	7	5	3	2
" 12-18		1		1	4	5	5	6	9
" 19-25		7	6	6	7	6	8	8	7
" 26-2		1	1	3	2		2	3	3
May 3-9			1	1	2				
" 10-16			2	4	9		1	3	5
Lost					1			2	3
Percentage loss of Yield		3.4	5.2	7.4	10.8	3.4	4.6	7.0	8.9

	Stratford A	Stratford B	Stratford C	Stratford D	Cheltenham A	Cheltenham B	Cheltenham C	Cheltenham D
Before March 15	155	143	126	114	160	149	133	117
March 15-21	21	27	36	38	16	20	24	29
" 22-28	7	7	8	13	4	8	13	11
" 29-4	1	2	7	8			2	9
April 5-11	1	3	4	6	5	5	3	5
" 12-18	3	1		1	3	3	6	9
" 19-25	10	10	9	8	6	7	7	7
" 26-2	2	4	5	5	2	1	1	1
May 3-9		3	3	3	4	3	2	1
" 10-16			2	3		3	3	3
Lost				1		1	6	8
Percentage loss of Yield	3.9	5.3	6.7	8.1	4.4	5.8	8.8	10.7

14-day Schedules

Date	Drainage	Newport A	Newport B	Newport C	Newport D	Worcester A	Worcester B	Worcester C	Worcester D
Before March 15		171	149	127	108	193	176	158	144
March 15-21		45	43	41	52	36	38	37	36
" 22-28		23	25	25	21	20	21	20	18
" 29-4		20	25	22	21	1	10	22	25
April 5-11		6	14	18	22	7	5	4	10
" 12-18		3	6	16	16	9	10	11	11
" 19-25		7	7	10	11	10	10	12	13
" 26-2		1	4	5	10	2	3	3	4
May 3-9		2	1	3	3		2	1	3
" 10-16		2	6	9	14	2	4	6	8
Lost				4	12		1	6	8
Percentage loss of Yield		5.5	8.0	12.4	17.7	5.1	7.0	9.9	12.4

	Stratford A	Stratford B	Stratford C	Stratford D	Cheltenham A	Cheltenham B	Cheltenham C	Cheltenham D
Before March 15	187	171	144	127	197	177	150	128
March 15-21	39	46	52	55	33	38	46	50
" 22-28	18	17	24	26	17	17	17	15
" 29-4	8	13	18	18	1	10	17	20
April 5-11	5	6	11	16	7	5	6	12
" 12-18	3	2	3	5	5	10	14	15
" 19-25	10	10	9	8	7	7	9	15
" 26-2	5	5	6	9	3	2	2	5
May 3-9	5	5	3	4	5	3	2	1
" 10-16		5	6	7	4	6	4	3
Lost			4	5	1	5	13	16
Percentage loss of Yield	5.7	7.2	9.7	11.6	6.1	8.4	11.9	14.6

Date	Drainage	Oxford				Reading			
		A	B	C	D	A	B	C	D
Before March 15		207	193	172	155	202	183	158	139
March 15-21		31	33	35	36	36	36	34	31
" 22-28		11	15	19	19	16	18	19	21
" 29-4		3	7	16	19	5	12	17	13
April 5-11		4	3	2	10	6	9	16	22
" 12-18		6	9	9	9	2	2	6	12
" 19-25		10	9	12	14	10	9	10	10
" 26-2		2	6	6	6	3	4	6	5
May 3-9		1	5	3	2		3	1	2
" 10-16				5	6		4	8	8
Lost				1	4			5	17
Percentage loss of Yield		4.0	6.0	8.1	10.3	4.0	6.3	10.4	15.6

Average Yield Percentage Losses for WESTERN Area

Schedules	Drainage A	B	C	D
7-day	2.18	3.41	5.19	6.35
10-day	3.27	4.85	7.04	9.19
14-day	5.08	7.17	10.39	13.71